



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,656	10/09/2001	Mark Watson	476-2056	6184
23644	7590	01/13/2006	EXAMINER	
BARNES & THORNBURG, LLP P.O. BOX 2786 CHICAGO, IL 60690-2786			LIN, KENNY S	
			ART UNIT	PAPER NUMBER
			2154	

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/973,656

Applicant(s)

WATSON, MARK

Examiner

Kenny Lin

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-14 are presented for examination. Claims 15-16 are canceled.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant admitted prior art (AAPA), in view of Borella et al (Borella), US 6,697,354, and Hung et al (Hung), US 6,760,429.

4. Borella and Hung were cited in the previous office action.

5. As per claim 1, AAPA taught the invention substantially as claimed including a method of establishing a communications path between a first entity and a second entity in a communications network comprising at least two address domains, said address domains being connected by two or more address translators (fig. 1, page 5, line 28-31, page 6, lines 1-11), said method comprising the steps of:

- a. Sending a call set-up message from the first entity to a first one of the network address translators via only a first one of the address domains (page 6, lines 28-

Art Unit: 2154

34), said call set-up message containing an address of the first entity within the first address domain (page 6, lines 32-36);

- b. Receiving the call set-up message at the first network address translator (page 7, lines 1-4);
- c. Forwarding the call set-up message to the second entity via a second one of the address domains and a second one of the address translators (page 7, lines 12-15) such that the information in the call set-up message can be used to establish a communications path from the second entity to the first entity (page 7, lines 12-15, communication is inherently established between the first and second entity through the address translators).

6. AAPA does not teach to retain the address of the first entity within the first address domain in the call set-up message as well as adding information about the identity of the first address domain to the call set-up message and that the information in the call set-up message can be used to establish a communications path from the second entity to the first entity which excludes one or more of said address domains. Borella taught a network address translation method to retain the address of the first entity within the first address domain in the call set-up message and insert adding information about the identity of the first address domain to the call set-up message and transmit the message to the second network (col.17, lines 23-41) and that the information in the call set-up message can be used to establish a communications path from the second entity to the first entity (i.e., using the source address incorporated in the message). It would have been obvious to one of ordinary skill in the art at the time the invention was made to

Art Unit: 2154

combine the teachings of AAPA and Borella because Borella's teaching of adding header with source address and destination address enables AAPA to further insert data into the message and allows the receivers to identify the sender by using the addresses incorporated in the message.

7. AAPA and Borella did not specifically teach that the communications path excludes one or more of said address domains. However, Hung taught an entity to receive a call set-up message and use the message to establish a telephone communication with the sending entity such that the telephone communication excludes address domains (col.4, lines 16-17, 26-38). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of AAPA, Borella and Hung because Hung's teaching of establishing communications in response to receiving a request enables AAPA and Borella's system to establish communication by using the information obtained from the request and determining a proper communication path.

8. As per claim 2, AAPA, Borella and Hung taught the invention substantially as claimed in claim 1. AAPA further taught said step b of receiving further comprises creating a binding between a second address domain address for a port at the first address translator and the first address domain address of the first entity (page 7, lines 1-4). AAPA, did not specifically teach to add the second address domain address of that port to the call set-up message when the binding is created. However, Borella taught to add the second address domain address of that port to the call set-up message (col.17, lines 23-41; see claim 1 rejection).

9. As per claim 3, AAPA, Borella and Hung taught the invention substantially as claimed in claim 1. AAPA further taught that after said step b of receiving, forwarding the call set-up message to a third network address domain via a third network address translator (fig.1, page 6, lines 1-3).

10. As per claim 4, AAPA, Borella and Hung taught the invention substantially as claimed in claim 3. AAPA further taught to comprise a third network address translator (fig.1, page 6, lines 1-3). Borella taught to add information about an identity of the third address domain to the call set-up message (col.17, lines 23-41). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of AAPA, Borella and Hung because Borella's teaching of adding header with source address and destination address enables AAPA to further insert data into the message and allows the receivers to identify the sender by using the addresses incorporated in the message.

11. As per claim 5, AAPA, Borella and Hung taught the invention substantially as claimed in claim 1. Borella further taught that said first address translator is arranged to access information from another network entity in order to carry out the method of step b of claim 1 in respect of adding information about the identity of the first address domain to the call set-up message (col.17, lines 54-56).

12. As per claim 6, AAPA, Borella and Hung taught the invention substantially as claimed in claim 1. Hung further taught that said communications path is arranged to provide a service that

Art Unit: 2154

is hosted by one or more servers within the communications network but not within the first address domain (col.2, lines 35-47, col.4, lines 16-17, 26-38).

13. As per claim 7, AAPA, Borella and Hung taught the invention substantially as claimed in claim 1. AAPA further taught that said first address domain is provided in a private region of the communications network and said second address domain is provided in a public region of the communications network (page 6, lines 13-21).

14. As per claim 8, AAPA, Borella and Hung taught the invention substantially as claimed in claim 1. AAPA further taught that said communications network is selected from an Internet protocol communications network or an asynchronous transfer mode communications network (page 1, lines 9-30, page 5, lines 28-31, page 6, lines 1-3).

15. Claims 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant admitted prior art (AAPA), in view of Borella et al (Borella), US 6,697,354, and "Official Notice".

16. As per claims 9, 12 and 13-15, AAPA taught the invention substantially as claimed including an address translator suitable for connection between a first and a second address domain in a communications network (fig.1, page 5, line 28-31, page 6, lines 1-11), said network address translator comprising:

- a. An input arranged to receive a call set-up message from an entity in the first address domain, said call set-up message comprising an address of the entity within the first address domain (page 6, lines 27-36).

17. AAPA did not specifically teach a processor arranged to modify the received call set-up message by adding information about the identity of the first address domain whilst retaining the address of the entity within the first address domain; and also adding information about an address of the network address translator itself within the second address domain to the call set-up message; said address being bound to the address of the entity in the first address domain. Borella taught a processor having an address translation method arranged to modify the received call set-up message by adding information about the identity of the first address domain whilst retaining the address of the entity within the first address domain (col.17, lines 23-41); and also adding information about an address of the network address translator itself within the second address domain to the call set-up message (col.17, lines 23-41); said address of the network address translator itself being bound to the address of the entity in the first address domain (col.17, lines 23-41). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of AAPA and Borella because Borella's teaching of adding header with source address and destination address enables AAPA to further insert data into the message and allows the receivers to identify the sender by using the addresses incorporated in the message. AAPA and Borella did not specifically teach that the communication path excludes one or more of said address domains. AAPA and Borella did not specifically teach to add information about an address of the network address translator itself

Art Unit: 2154

within the second address domain to the call set-up message. However, since Borella taught to add to the call set-up message data such IP addresses, it is obvious to add additional information to the message as well. Official Notice is taken that both the concept and advantage of the inserting additional information to a message is well known and expected in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of AAPA, Borella and further enable AAPA and Borella's system to insert more information to a message during the process of modifying the message.

18. As per claim 10, AAPA and Borella taught the invention substantially as claimed in claim 9. Borella further taught said processor is provided externally to the address translator and is connected to the address translator by a communication network (col.17, lines 54-56).

19. As per claim 11, AAPA and Borella taught the invention substantially as claimed in claim 9. Borella further taught to comprise an output arranged to forward the call set-up message to the second address domain (col.17, lines 38-41).

Response to Arguments

20. Applicant's arguments filed 11/2/2005 have been fully considered but they are not persuasive.

21. In the remark applicant argued (1) Borella fails to teach the feature of "retraining the address of the first entity within the first address domain in the call set-up message as well as

Art Unit: 2154

adding information about the identity of the first address domain to the call set-up message.” (2) Hung provides no teaching of “forwarding the call set-up message to the second entity via a second one of the address domains and a second one of the address translators such that the information in the call set-up message can be used to establish a communications path from the second entity to the first entity which excludes one or more of said address domains.” (3) No motivation to combine the teachings of AAPA, Borella and Hung.

22. Examiner traverse the arguments:

As to point (1), in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). AAPA taught to use call set-up message from the first entity to a network address translator via only a first one of the address domains (page 6, lines 28-34), said call set-up message containing an address of the first entity within the first address domain (page 6, lines 32-36); receiving the call set-up message at the first network address translator (page 7, lines 1-4); forwarding the call set-up message to the second entity via a second one of the address domains and a second one of the address translators (page 7, lines 12-15) such that the information in the call set-up message can be used to establish a communications path from the second entity to the first entity (page 7, lines 12-15, communication is inherently established between the first and second entity through the address translators). Borella taught a network address translation method to “adds outer IP header to the data packet (e.g. adding information about the identity of the first address domain to the call set-

Art Unit: 2154

up message) with the source address set to the network device's internal IP address" (e.g. retain the address of the first entity within the first address domain in the call set-up message; the IP address of the network device remain unchanged in the data packet) and "forwards the data packet to router" (e.g. transmit the message to the second network) (col.17, lines 23-41) and that the information (i.e. IP address) in the call set-up message can be used to establish a communications path from the second entity to the first entity (i.e., using the source address incorporated in the message). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of AAPA and Borella because Borella's teaching of adding header with source address and destination address enables AAPA to further insert data into the call set-up message and allows the receivers to identify the sender by using the addresses incorporated in the message. Furthermore, since AAPA taught the use of call set-up message, where a call set-up message can be a data packet, it would then have been obvious to use Borella's teaching of network address translating method in combination with AAPA's teaching to add IP header information to the call set-up messages to forward the call set-up message to the destination.

Borella taught to adds outer IP header to the data packet. Since IP header is known to inherently provide its domain information, it is clearly that AAPA and Borella in combination taught the limitation of adding information about the identity of the first address domain to the call set-up message.

As to point (2), Hung taught an entity to receive a call set-up message and use the message to establish a telephone communication with the sending entity such that the telephone communication does not need the address domains (col.4, lines 16-17, 26-38; connecting with

Art Unit: 2154

telephone calls using PSTN). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of AAPA, Borella and Hung because Hung's teaching of establishing communications in response to receiving a request enables AAPA and Borella's system to establish communication by using the information obtained from the request and determining a proper communication path.

As to point (3), in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivations are found in the references and also in the knowledge generally available to one of ordinary skill in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of AAPA, Borella and Hung because Hung's teaching of establishing communications in response to receiving a request enables AAPA and Borella's system to establish communication by using the information obtained from the request and determining a proper communication path.

Because Applicants have failed to challenge any of the Examiner's "Official Notices" stated in the previous office action in a proper and reasonably manner, they are now considered as admitted prior art. See MPEP 2144.03

Conclusion

23. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenny Lin whose telephone number is (571) 272-3968. The examiner can normally be reached on 8 AM to 5 PM Tue.-Fri. and every other Monday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Art Unit: 2154

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ksl
January 5, 2006

 **JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100**